

I CLAIM:

1 CLAIM 1. Apparatus for massaging the spinal area of a  
2 person's back, comprising a table having a main frame and an upper  
3 surface for support of a person reclining in a supine position  
4 looking up; said table having a head end, a foot end, and opposed  
5 sides; an array of thrusters; each of said thrusters terminate in  
6 a back engaging fixture at an upper end thereof and having a lower  
7 end opposed to the upper end; said fixture includes spaced finger-  
8 like protrusions depending therefrom and arranged to simul simul-  
9 taneously engage and massage both sides of the spinal area;

10 said upper surface has an upwardly opening, longitudi-  
11 nally extending groove formed therein that is equal distant from  
12 the table sides through which said thrusters extend;

13 an elongated vibrating member for supporting and vibrat-  
14 ing said thrusters, said vibrating member having opposed ends and  
15 positioned in underlying relationship respective said table sur-  
16 face for reciprocatingly receiving each said thrusters which are  
17 arranged in spaced relationship along a medial length thereof to  
18 simultaneously bring said finger-like protrusions into engagement  
19 respective both sides of the spinal area of the back, and biasing  
20 means at the lower end of each thruster:

21 an upper slide bearing reciprocatingly receiving a me-  
22 dial length of said vibrating member;

23 said opposed ends, respectively, of said elongated vi-  
24 brating member are connected for movement between a crank means  
25 and a pivoted bearing means, respectively; and means for rotating  
26 said crank means to induce a rapidly reciprocating motion respec-  
27 tive the longitudinal axis of the vibrating member while the lon-  
28 gitudinal axis of each said thruster is moved in a circle about

29 its vertical axis and of a magnitude whereby a vibratory sensation  
30 is effected respective the back by rotating said crank means at a  
31 relatively high rate of rotation;

32 an elongated spring plate positioned in underlying rela-  
33 tionship respective said elongated mount member for engaging the  
34 biasing means of the thrusters to elevate each of the finger-like  
35 protrusions into a curved plane that coincides with the curvature  
36 the back, whereby, said spring plate simultaneously engages the  
37 spring end of each thruster to thereby resiliently bias the  
38 thrusters into engagement with both sides of the spinal area.

1 Claim 2. The apparatus of Claim 1, wherein said spring  
2 plate is supported by a base plate, said base plate is slidably  
3 captured within lower slide bearings for fore and aft movement to  
4 thereby move the vibrating member and spring plate concurrently  
5 along a path parallel to the groove;

6 whereby the vibrating member, together with the base  
7 plate impart a longitudinal movement into the vibrating member to  
8 move said thrusters in a spiral-like pattern, thereby massaging  
9 the back along the spinal area.

1 Claim 3. The apparatus of Claim 2, wherein the apparatus  
2 further includes an elevating member arranged for movement towards  
3 and away from said vibrating mount assembly; the elevating means  
4 being supported by the base plate to position the thrusters at an  
5 elevation that biases the back engaging fixture against the spinal  
6 area with a predetermined force.

1           Claim 4. The apparatus of Claim 1, wherein said vibra-  
2     ting mount assembly is supported by a base plate, said base plate  
3     is slidably captured within slide bearings for fore and aft move-  
4     ment to thereby move the vibrating member and spring plate concur-  
5     rently along a path parallel to the groove;

6           and further including an elevating member arranged for  
7     movement towards and away from said base plate; and elevating  
8     means supported by said base plate to position the thrusters at an  
9     elevation that biases the back engaging fixture against the spinal  
10    area with a predetermined force;

11           whereby, the vibrating mount assembly together with the  
12    base plate impart a movement into the thrusters that effect a  
13    spiral-like pattern along the spinal area.

1           Claim 5. A massage table having an interior and a top  
2     surface of a curved configuration for receiving a reclining per-  
3     son looking up; an array of thrusters each having opposed ends  
4     with there being a back engaging fixture attached to one end  
5     thereof to simultaneously engage and massage both sides of the  
6     spinal area;

7           an upwardly opening longitudinally extending groove  
8     formed within the top surface through which said thrusters may  
9     ajustably extend into contact with a person's back;

10           a vibrating member positioned below the top surface in  
11    alignment with the spinal area, with the fixture of the thrusters  
12    being positioned within the groove and extended into contact with  
13    respect to the back; a bearing slide supported respective said  
14    table, a longitudinally extending base plate slidably supported in

15 low friction relationship respective said bearing slide for recip-  
16 rocating longitudinally of the spine;

17 a spring board spaced from said base plate and connected  
18 to be moved vertically respective said base plate and said vibra-  
19 ting member end to be reciprocated longitudinally by said base  
20 plate; elevating means connected to said base plate to selectively  
21 change the spaced apart relationship between said spring board and  
22 said base plate; while the vibrating member is supported respec-  
23 tive the bearing slide for the base plate;

24 said vibrating member having opposed ends, guide means  
25 formed in spaced relationship along said vibrating member, said  
26 array of thrusters being spaced from one another, said opposed  
27 ends of said thrusters forming a medial length thereof  
28 reciprocatingly received within said guide means of said vibrating  
29 member;

30 said thrusters having a spine engaging end opposed to an  
31 actuating end by which the thrusters are resiliently forced into  
32 contact with the spinal area and reciprocated respective to said  
33 vibrating member;

34 the head end of said vibrating member being supported by  
35 a journal means for reciprocal and pivotal movement with the op-  
36 posed end thereof being moved with circular movement; whereby,  
37 said thrusters are moved in a circle at a relatively fast rate of  
38 movement which imparts a vibrating sensation in the back while  
39 simultaneously the thrusters move longitudinally at a relatively  
40 slow rate of speed.

1           Claim 6. The apparatus of Claim 5 wherein said vibrating  
2 member is supported by an elevating member which in turn is sup-  
3 ported by an expansible chamber which in turn is supported by a  
4 base plate, said base plate is slidably captured within slide  
5 bearings supported by the table for fore and aft movement to  
6 thereby move the elevating member which moves said spring plate  
7 and thrusters concurrently along a path parallel to the groove;

8           whereby, the vibrating member together with the base  
9 plate impart a movement into the thrusters that effect a spiral-  
10 like massaging action while describing a pattern parallel to and  
11 along both sides of the spinal column.

1           Claim 7. The apparatus of Claim 5 wherein said vibrating  
2 member is supported by said base plate and is slidably captured  
3 within slide bearings for fore and aft movement to thereby move  
4 the spring board and vibrating member concurrently along a path  
5 parallel to the groove;

6           wherein, the elevating member further includes vertical  
7 guides arranged for guiding movement of the spring board towards  
8 and away from said base plate and said expansible chamber is a  
9 pneumatic cylinder supported by said base plate, to position the  
10 thrusters at an elevation that biases the fixture against the  
11 spinal area with a predetermined force;

12           whereby, the vibrating support together with the base  
13 plate impart a movement into the thrusters that effect a spiral-  
14 like massaging pattern along either side of the spine.

1           Claim 8. The apparatus of Claim 5, wherein said vibra-  
2     ting member is supported by a base plate, said base plate is  
3     slidably captured within slide bearings for fore and aft movement  
4     to thereby move the spring board and vibrating member concurrently  
5     along a path parallel to the groove;

6           and further including a spring board arranged for move-  
7     ment towards and away from said base plate; and elevating means  
8     supported by said base plate to position the thrusters at an ele-  
9     vation that biases the fixture against the spinal area with a  
10    predetermined force;

11          whereby, the vibrating support together with the base  
12    plate impart a movement into the thrusters that effect a spiral-  
13    like pattern along the spinal area.

1           CLAIM 9. Massaging apparatus for massaging a person's  
2     back in proximity of the spinal area, said apparatus comprising a  
3     main frame member that forms a top surface within which there is  
4     supported a vibrating bar; a plurality of thrusters arranged in  
5     spaced relationship respective one another, each of said thrusters  
6     having a massaging back engaging end opposed to a spring end;

7           an elongated vibrating mount bar reciprocatingly receiv-  
8     ing each said thruster;

9           said vibrating mount bar is provided with a pivoted end  
10    opposed to an oscillated end wherein the oscillated end is moved  
11    with a circular motion while the pivoted end reciprocatingly re-  
12    ceives the marginal pivoted end to thereby move each said thruster  
13    with a different magnitude of oscillatory motion with the thrust-  
14    ers adjacent the oscillated end of the vibrating mount being moved  
15    with the greatest magnitude while the thrusters adjacent the piv-

16 oted end of the vibrating mount being moved with a minimum of  
17 movement;

18 a spring support mounted for movement toward and away  
19 from said vibrating mount and simultaneously engaging each spring  
20 end of said thrusters for moving the massage end of each thruster  
21 into engagement with the spinal area of ones back with a selected  
22 force that is proportional to the selected distance between the  
23 spring support and the vibrating mount;

24 said spring support is mounted for movement respective  
25 to a base plate, said base plate is mounted for movement respec-  
26 tive a main frame, whereby, said base plate moves the spring plate  
27 and the vibrating mount bar parallel to the longitudinal axis of  
28 the spine to engage the spinal area with massaging action that  
29 describes a spiral pattern.

1 Claim 10. The apparatus of Claim 9, wherein said vibra-  
2 ting bar has spaced apertures for reciprocatingly receiving a  
3 thruster therein.

1 Claim 11. The apparatus of Claim 10, wherein said top  
2 surface includes a groove extending along the spinal area for  
3 receiving the back engaging end of the thrusters therethrough.

1           Claim 12. The apparatus of Claim 11, wherein the piv-  
2   oted end of said vibrating bar is positioned adjacent the head end  
3   of the groove while the oscillated end of the vertical bar is  
4   positioned at the foot end of the groove.

1           Claim 13. The apparatus of Claim 12, wherein the oscil-  
2   lated end of the bar is vibrated by connecting the foot end of the  
3   bar to a crank that is rotated at a relatively fast rotational  
4   speed while the head end of the bar is pivotally and reciprocatingly  
5   mounted to form the small part of the spiral which increases  
6   in size towards the crank.

End Of Claims 1-13.